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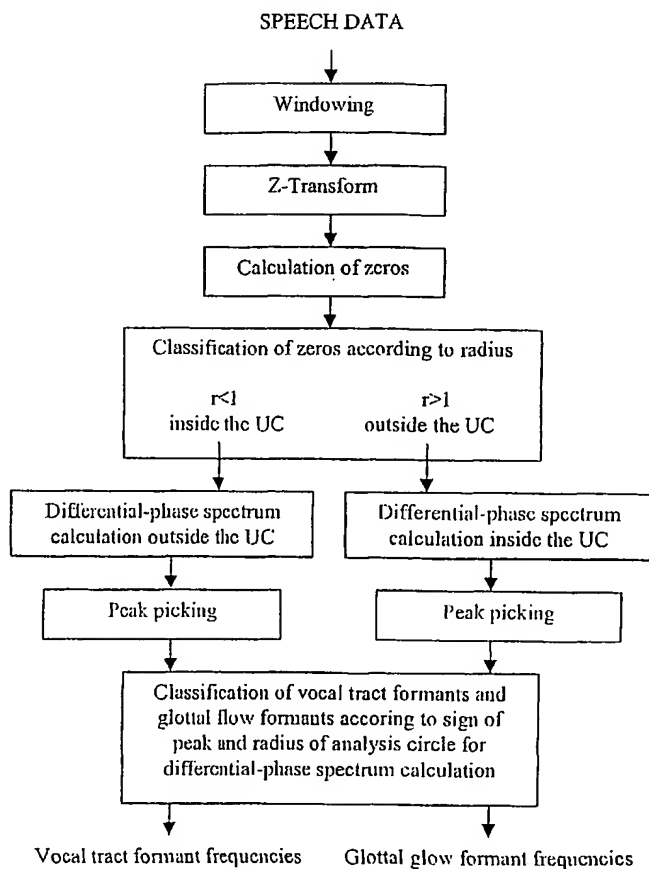
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(54) Title: **METHOD FOR ESTIMATING RESONANCE FREQUENCIES**



(57) Abstract: The present invention is related to a method for estimating from an input signal the resonance frequencies of a system modelled as a source and a filter, comprising the steps of - determining the Z-transform of the input signal, - calculating the differential-phase spectrum of the Z-transformed input signal, whereby the Z-transform is evaluated on a circle centered around the origin of the Z-plane, - detecting the peaks on said differential-phase spectrum, - attributing the peaks to either the source or the filter, - estimating the resonance frequencies from the peaks.

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